

LinuxCon Europe Embedded Linux Conference Europe Report

2014.10.24 (Fri)

Panasonic Corporation
Shinsuke Kato

kato.shinsuke@jp.panasonic.com

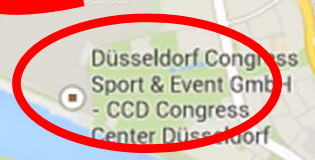
- LinuxCon/ELCE **概要**
- Keynote Report

- LinuxCon Europe / Cloud Open / Embedded Linux Conference Europe
3つのConferenceが共催
- **場所**: Congress Centre Dusseldorf
- **期間**: 2014/10/13～15 の 3日間
- **参加者(登録者)**: 2000人 (ELCEで600人)
 - 登録者多数のため, レジストレーションを締切った, とのこと
- Co-Located Events も多数あり

会場，どこ？

デュッセルドルフ国際空港

ここ



ライン川

デュッセルドルフ
Düsseldorf

ライン川







5万人収容のスタジアム（エスプリ・アリーナ）

3つのConferenceが共催なので・・・



スポンサー, 多い!

LinuxCon

Diamond Sponsor



Platinum Sponsor



Gold Sponsors



ELCE

Gold Sponsor



Silver Sponsor



Bronze Sponsor



Cloud
Open

Platinum Sponsor



Gold Sponsors



Silver Sponsor



Sessionは・・・

Monday

October 13-15, 2014

LINUXCON
EUROPE

CO-LOCATED EVENTS

Training: Business Process 2 - 9:00am - 5:00pm
Front-Office Linux Workshop (Front Office) - 9:00am-5:00pm
Security/OS/IT Workshop (Front Office) - 9:00am-5:00pm
Linux Workshop (Front Office) - 9:00am-5:00pm

Düsseldorf, Germany

cloudopen
EUROPE

Embedded Linux
Conference Europe

	Room 01	Room 02	Room 03	Room 14	Room 15	Room 16	Room 17	Room 18	Room 19	Room 20	Room 21	Room 22	Room 23
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さらに, Co-Located Events が...

Co-Located Events

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Sun	<ul style="list-style-type: none">• Real Time Linux Workshop (2日間, US\$150)
Mon	<ul style="list-style-type: none">• Tracing Summit• Real Time Linux Workshop (2日間, US\$150)• OpenDaylight Hackfest• Uboot Mini-Summit• LTSI Workshop
Tue	<ul style="list-style-type: none">• KVM Forum (3日間, US\$500)• HP Helion OpenStack Workshop• Audio Mini-conference• Real Time Linux Workshop• Embedded Android Workshop• Women in Open Source Luncheon
Wed	<ul style="list-style-type: none">• KVM Forum (3日間, US\$500)• Linux Plumbers Conference (3日間, US\$600)• Infrastructure.Next• Pulse Audio Maintainer Meeting & Mini-Summit• Women's Resume Workshop• LPC Automotive Micro-conference• Functional Safety Workshop
Thu	<ul style="list-style-type: none">• KVM Forum (3日間, US\$500)• Linux Plumbers Conference (3日間, US\$600)• Community Management Workshop (US\$100)• Yocto Project Developer Day (US\$129)• Media Mini-Summit• GStreamer Conference (2日間, US\$100)• oVirt Workshop• CE Workgroup BoF Sessions
Fri	<ul style="list-style-type: none">• Linux Plumbers Conference (3日間, US\$600)• Media Mini-Summit• GStreamer Conference (2日間, US\$100)

Co-Located Events

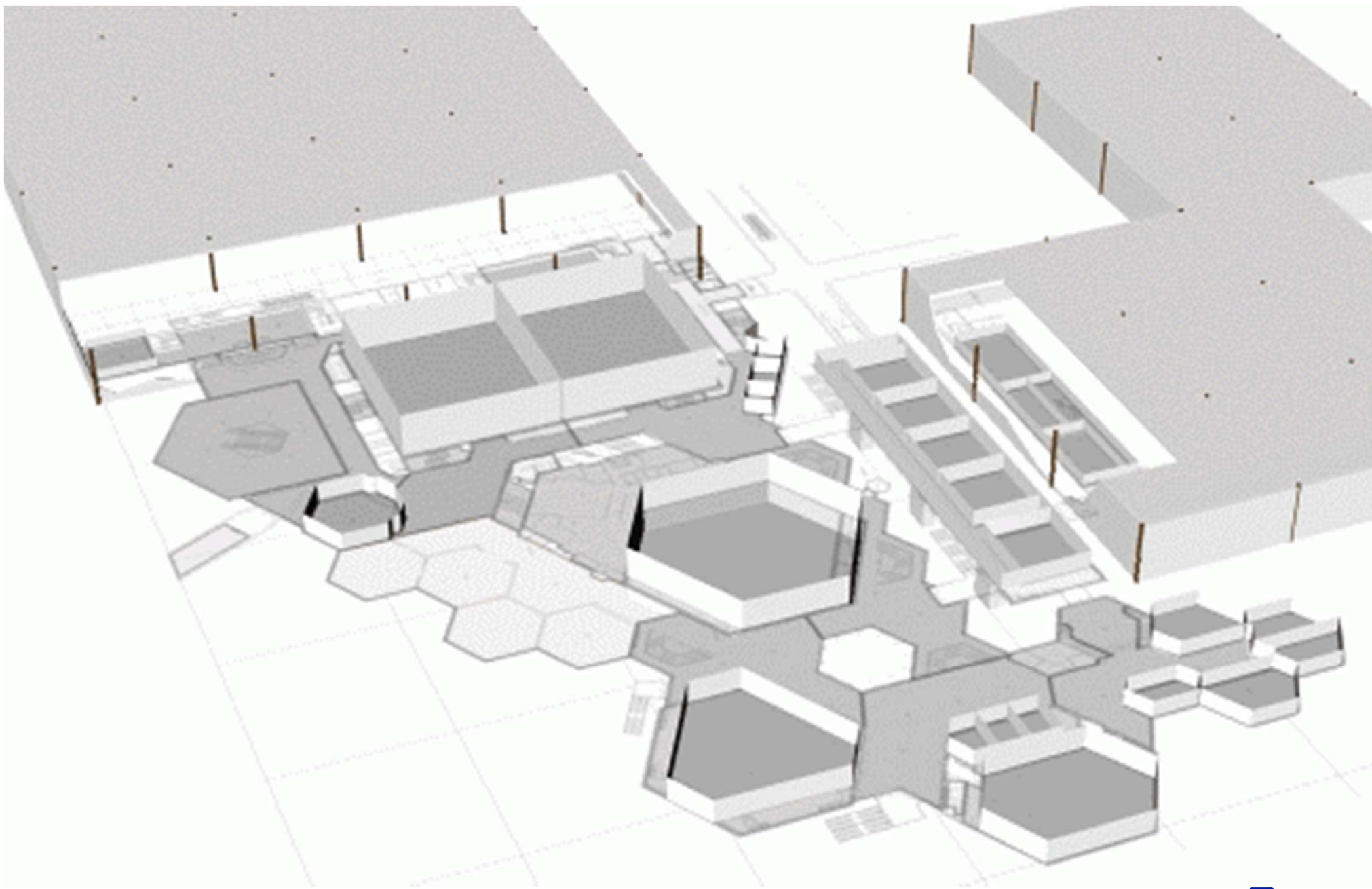
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Keynote 会場



Keynote 会場

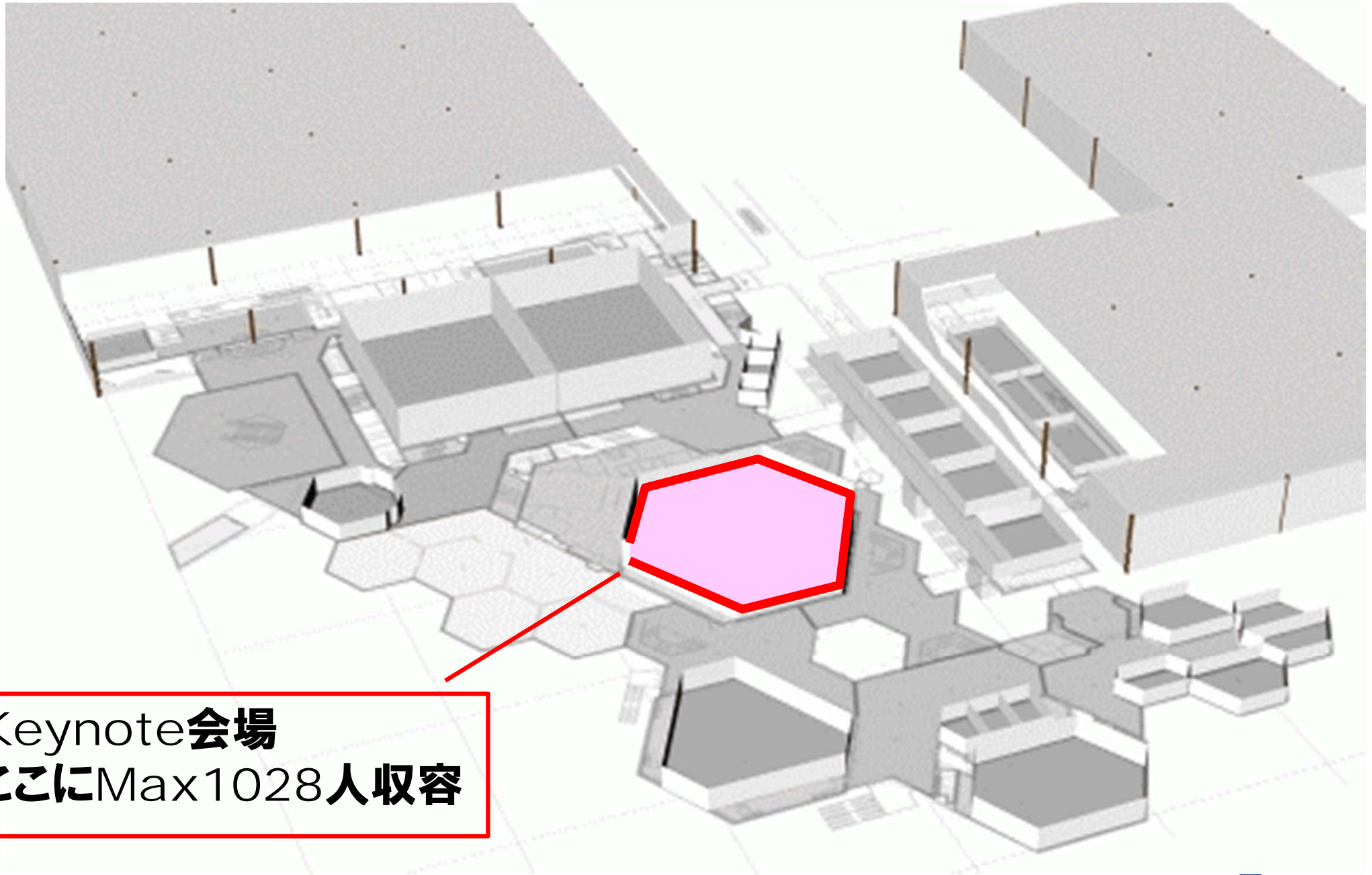
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Keynote 会場

20





Keynote会場
ここにMax1028人収容



Keynote (を 少しでも・・・)

- Title : The state of Linux
- Speaker : Jim Zemlin
- **トピック**
 - Dronecode**プロジェクトの発表**
- Dronecode**プロジェクト**
 - Collaborative Project
 - The result will be a common, shared open source platform for Unmanned Aerial Vehicles (UAVs)

Keynote

25

- Title : The state of Linux
- Speaker : Jim Zemlin
- Dronecodeプロジェクトメンバー



LINUX: WHERE ARE WE GOING

DIRK HOHNDEL

CHIEF LINUX AND OPEN SOURCE TECHNOLOGIST, INTEL

LINUS TORVALDS


FELLOW, THE LINUX FOUNDATION



LINUXCON
EUROPE



Embedded Linux
Conference Europe

 **LINUX FOUNDATION**

Keynote

27



会場満員

28



- **Linuxを開発して23年，自分がしてきた技術的判断で後悔したことはない**
⇒ それらが完全に間違っていたとしても，技術的な問題はあとから直せるから
- **Q: 23年間で，何か決定事項を変更するとしたら？**
A: 何か1つの決定が重要だということはない
- **Q: 次のLinusになりたいと思う学生に送る言葉は？**
A: 情熱をもてる何かを見つけ，Just Do It.

https://www.youtube.com/watch?feature=player_embedded&v=8EUuaY6rh4o&list=UUfX55Sx5hEFjoC3cNs6mCUQ

- How Open Source Communities are Improving the Health of the Poor - [Paul Biondich, Founder and President of OpenMRS](#)
- Building Blocks of AWS - [Chris Schlaeger, Managing Director at Amazon Development Center](#)
- Building Exponential Communities - [Jono Bacon, Senior Director of Community at XPRIZE](#)
- The Service Enabling Wireless Network - [Anthony C. K. Soong, Chief Scientist for Wireless Research and Standards at Huawei Technologies Co. Ltd,](#)
- Qubes OS - [Joanna Rutkowska, Founder and CEO of Invisible Things Lab](#)
- Alien Life Forms: Communities, Enterprises and All the Rest - [Olaf Kirch, Director SUSE Linux Enterprise](#)

私のBoF Session・・・

**BoFs: What are the
Technical Issues on
Linux For IoT**
Shinsuke Kato,
*Panasonic & Bryant
Eastham, Panasonic*

Düsseldorf, Germany

Room 21	Room 22	Room 23																																													
<table><thead><tr><th>BoF</th><th>BoF</th><th>BoF</th></tr></thead><tbody><tr><td>Performance Analysis Using the Prof Tools Mitsuru Fujita</td><td>Extending Real-Time Capabilities with the FRC Felix Schmitt Thilo Strohmann</td><td>Is SDR Fast & Secure? Pavel Tenev Alec Woloski</td></tr><tr><td>10 Lessons Learned in Real-Time Embedded Linux Christian J. Loh</td><td>Case Study: Building a High-Quality Video Pipeline Using GStreamer & V4L2 on an ARM Tamas Földes Michele D'Amico</td><td>What Can Possibly Go Wrong? Remote Exploitation Cedric Belfrage</td></tr><tr><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr><tr><td>8 Days to Agree: Bridging the Gap Between David Heston, CloudCru</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr><tr><td>Putting White and Black Box Linux Kernel Forensics and Current Forensic Analysis David Heston, CloudCru</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr><tr><td>BoF: Real-Time Embedded Linux Thilo Strohmann</td><td>BoF: Real-Time Embedded Linux Thilo Strohmann</td><td>BoF: Real-Time Embedded Linux Thilo Strohmann</td></tr></tbody></table>	BoF	BoF	BoF	Performance Analysis Using the Prof Tools Mitsuru Fujita	Extending Real-Time Capabilities with the FRC Felix Schmitt Thilo Strohmann	Is SDR Fast & Secure? Pavel Tenev Alec Woloski	10 Lessons Learned in Real-Time Embedded Linux Christian J. Loh	Case Study: Building a High-Quality Video Pipeline Using GStreamer & V4L2 on an ARM Tamas Földes Michele D'Amico	What Can Possibly Go Wrong? Remote Exploitation Cedric Belfrage	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	8 Days to Agree: Bridging the Gap Between David Heston, CloudCru	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Putting White and Black Box Linux Kernel Forensics and Current Forensic Analysis David Heston, CloudCru	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	BoF: Real-Time Embedded Linux Thilo Strohmann	BoF: Real-Time Embedded Linux Thilo Strohmann	BoF: Real-Time Embedded Linux Thilo Strohmann	<table><tbody><tr><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr><tr><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr><tr><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr><tr><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr></tbody></table>	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	<table><tbody><tr><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr><tr><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr><tr><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr><tr><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td><td>Technical Session Mitsuru Fujita</td></tr></tbody></table>	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita	Technical Session Mitsuru Fujita
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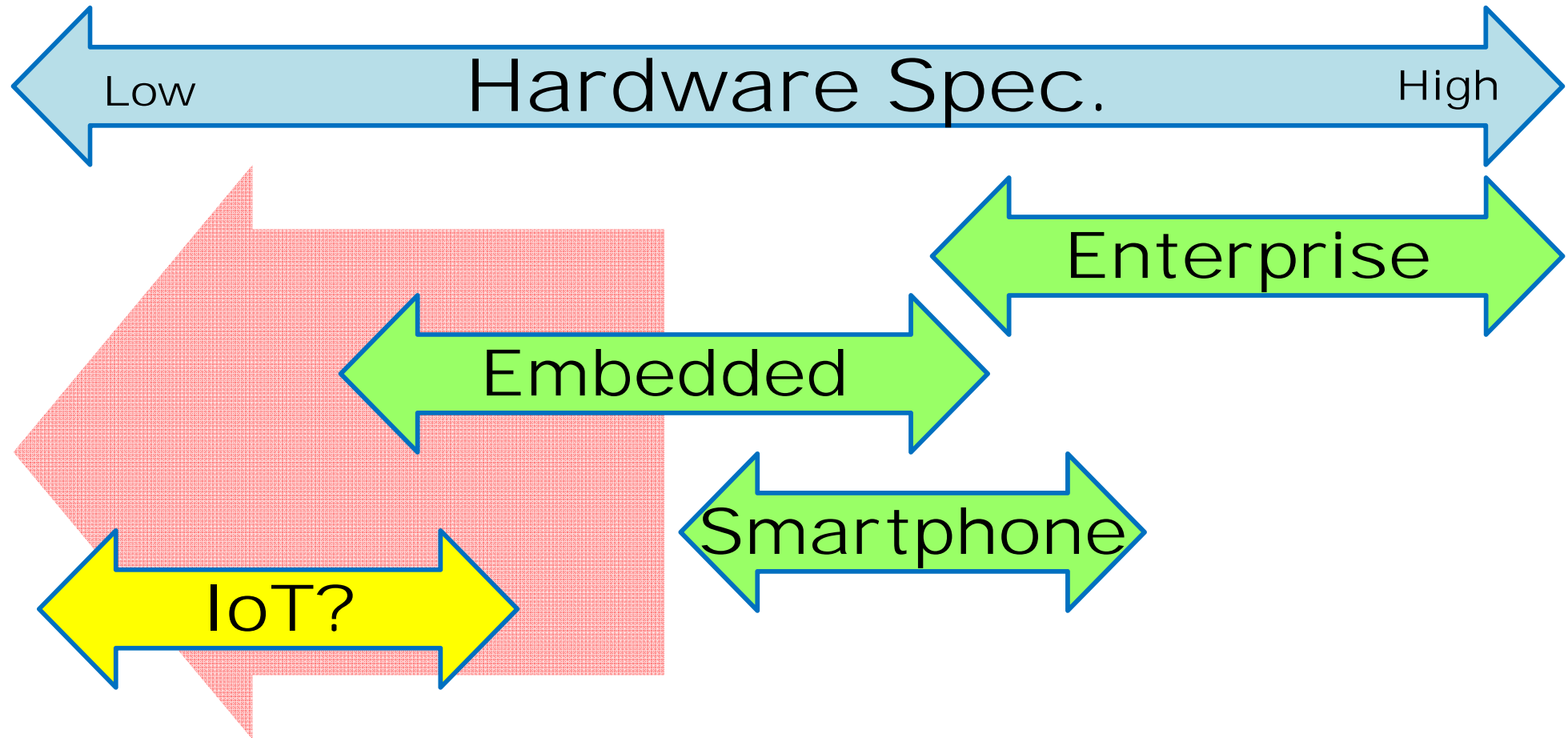
- 「BoF Sessionは、集まっても 20人 くらいだよな・・・」
- 「コアな人に語ってもらって 乗り切ろう・・・」

と思っていたら・・・

100人以上参加してくれた！

What do we focus on?

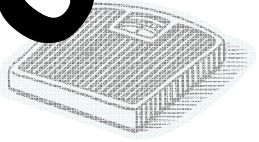
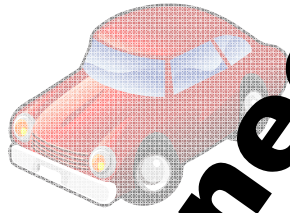
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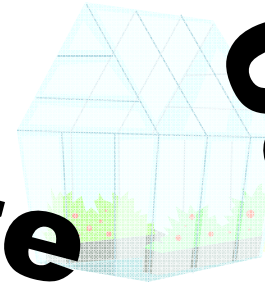
When Linux runs on lower spec.
hardware, what features do we need ?

What do we need for IoT?

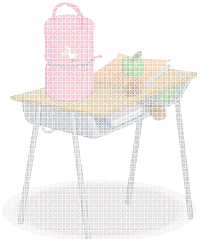
Connectivity



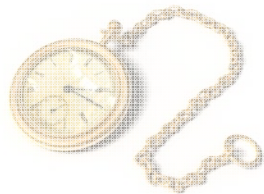
System size



Cost

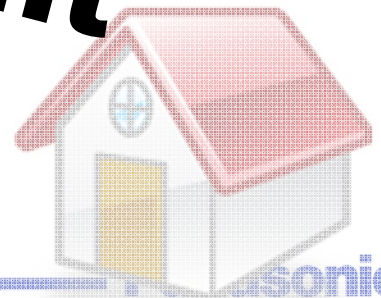
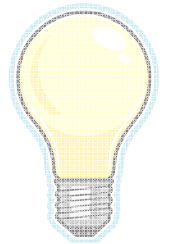


Security



Lifespan

Power requirement



その他





今回のロゴ

38



TシャツとSpeaker特典

39



Speaker特典
陶器のジョッキ

VIP レセプション！

40

**ナポレオンも来たと言う
老舗のレストラン**



Attendee レセプション！

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**Try to attend the
conference !**

Convince Your Boss

Want to attend The Embedded Linux Conference Europe 2014 but not sure how to bring up the subject with your boss? Well, we've got a sample letter to help make the process easier. See you in Düsseldorf!

"Convince Your Boss" Letter

Dear {Boss Name},

I'd like to attend The Embedded Linux Conference Europe (ELCE) 2014 taking place October 13-15, 2014, in Düsseldorf, Germany. I've researched many conferences, and the Embedded Linux Conference is the premier vendor-neutral technical conference for companies and developers using Linux in embedded products. This conference, now in its 7th year, has the largest collection of sessions dedicated exclusively to embedded Linux and embedded Linux developers.

Over 1,000 of the most talented individuals in the industry gather together for this event—it's like a pop up think tank! We've seen the Linux ecosystem shift and grow exponentially in recent years, and much of the work that has led to these accomplishments happened at Embedded Linux Conference.

Here's how I envision my attendance at Embedded Linux Conference strengthening our company:

- ELCE is embedded Linux experts talking about solutions to your embedded Linux problems. ELCE consists of 3 days of presentations, valuable tutorials and Bird-of-a-Feather sessions.
- The co-located LinuxCon offers content across three different verticals (Developer, Operations and Business); 6 tracks over 3 days for a total of over 100 sessions. These sessions include presentations, hands-on tutorials, deep-dive technical lectures, and visionary keynotes from industry leaders.
- The co-located CloudOpen has another 55 sessions covering a variety of topics also relevant to my job; containers, virtualization, big data, cloud platforms and much more.
- There is no additional cost to attend LinuxCon + CloudOpen sessions!

You can learn more about the event by clicking [here](#) and view last year's keynotes and other videos [here](#).

There is an early bird registration price of US\$600 (full price is US\$850) which ends August 1. Included in the registration fee is attendance to all ELCE + LinuxCon + CloudOpen sessions, attendance to some co-located events, access to the technology showcase, hallway tracks and lounges, continental breakfast, lunch, morning and afternoon breaks. It also includes entrance to Evening Events including the Opening Reception and Booth Crawl.

- LinuxCon Europe
 - <http://events.linuxfoundation.org/events/linuxcon-europe/program/slides>
- ELCE
 - <http://events.linuxfoundation.org/events/embedded-linux-conference-europe/program/slides>
- Cloud Open
 - <http://events.linuxfoundation.org/events/cloudopen-europe/program/slides>

Thank you

My e-mail address
kato.shinsuke@jp.panasonic.com